ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL

Game Branch / HPC Project Number:	15-109

PROJECT INFORMATION

Project Title: No Mas and West Indian wildlife water catchment redevelopment

Region and Game Management Unit: Region 1, GMU 4B

Local Habitat Partnership Committee (LHPC):
- Winslow

Was the project presented to the LHPC?
YES[] **NO**[X]

Has this project been submitted in previous years? **YES**[] **NO**[X]
If Yes, was it funded? **YES**[] **NO**[] → **Funded HPC Project #(s)**:

Project Type: redevelopment expenses for the two wildlife water catchments

Brief Project Summary: Redevelop No Mas and West Indian catchments from a current capacity of approximately 2,000 gallons each to 15,000 gallons each.

Big Game Wildlife Species to Benefit: Elk, Deer, Pronghorn, Javelina

Implementation Schedule (Month/Day/Year):

Project Start Date:
Spring 2016

Project End Date:
Fall 2016

Environmental Compliance:
NEPA Completed: Yes[] No[X] N/A[]
Projected Completion Date: November 2015

State Historic Preservation Office - Archaeological Clearance:
Yes[X] No[] N/A[]
Projected Completion Date: completed

Arizona Game and Fish Department EA Checklist: N/A[]
To be Completed by: Joe Currie
Projected Completion Date: Fall 2015

PROJECT FUNDING

Special Big Game License Tag Funds Requested:	**$** 143,685.80
Cost Share or Matching Funds:	**$** 5,000.00
Total Project Costs:	**$ 148,685.00**

PARTICIPANT INFORMATION

Applicant (please print): Evan Lautzenheiser	**Address**:2878 E. White Mtn. Blvd Pinetop AZ 85935	**E-mail**: elautzenheiser@azgfd.gov
Telephone: 928-358-8319		**Date**: 8-28-2015

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with: Black Mesa Ranger district, SSDV, AZGFD

NEED STATEMENT – PROBLEM ANALYSIS:

Permanent water for big game has been identified as a limiting factor in GMU 4B. At lower elevations (Pinion –Juniper habitat) in GMU 4B there are no or few dependable sources of perennial water. Wildlife relies on man-made water sources such as guzzlers or livestock water sources. Some of these livestock waters are available to wildlife all year long, but are limited in number. Without guzzlers that have sufficient storage capacity to meet wildlife demands, there would be no perennial water sources in these habitat types throughout the southern portion of the unit.

The primary purpose of this proposal is to increase perennial water availability in areas of Unit 4B that are lacking perennial water. With a goal of perennial water coverage across all parts of Unit 4B, all species both game and non-game will benefit. This will enable big game to better distribute themselves across larger areas and utilize some habitats throughout the year. Using a two-mile radius to evaluate perennial water distribution, these catchments will affect approximately 6,000 acres that currently have no perennial water coverage.

Arizona Game and Fish personnel and volunteers haul an average of 37,500 gallons/year of water to 15 operational guzzlers and 3 natural potholes in the southern portion of 4B. Without this water hauling, there would be only four perennial water sources over approximately 107,000 acres of habitat. In addition to the 15 operational guzzlers, there are six that are non-operational. The district goal for GMU 4B is to have all 24 guzzlers and potholes operational with sufficient storage capacity to meet wildlife demands. *See attached GMU 4B water distribution map.*

The No Mas catchment (#195) is a USFS guzzler identified by the Arizona Game and Fish Department, Region I, as a critical water within Game Management Unit 4B. Built in the 1970's, the guzzler is working, but is prone to going dry due to its small storage capacity (only approx. 2,000 gallons) due to the use by elk, deer and pronghorn that regularly use the guzzler. Arizona Game and Fish personnel haul approximately 3,000 gallons a year to this catchment to prevent it from going dry. The closest perennial water is approximately 1.17 miles away and is another USFS catchment (West Indian) that Arizona Game and Fish personnel haul approximately 3,000 gallons/year to maintain. 3.27 miles to the southeast is Red Knoll, another USFS catchment that Arizona Game and Fish personnel maintain with approximately 2,000 gallons of water per year.

The No Mas catchment is located in the southern portion of GMU 4B, west of Forest road 95, north of Forest Road 9976 and northwest of Red Knoll, located on the Apache-Sitgreaves National Forest. It is located in Pinion – Juniper mixed woodland and adjacent to grassland. This area supports good numbers of elk, mule deer and pronghorn. There is limited seasonal water available in the area so without permanent water, most wildlife in this area would be transient and seasonally restricted.

West Indian catchment (#196) is a USFS guzzler identified by the Arizona Game and Fish Department, Region I, as a critical water within Game Management Unit 4B. Built in the 1970's, the guzzler is working, but is prone to going dry due to its small storage capacity (only approx 2,000 gallons) due to the use by elk and deer that regularly use the guzzler. Arizona Game and Fish personnel haul approximately 3,000 gallons a year to this catchment to prevent it from going dry. The closest perennial water is approximately 1.17 miles away and is also a USFS catchment named No Mas which has approximately 3,000 gallons hauled to per year. The second closet perennial water is USFS catchment Mud which is 1.3 miles to the west which has approximately 2,000 gallons of water hauled to each year by Arizona Game and Fish personnel.

West Indian catchment is located in the southern portion of GMU 4B, east of forest road 9976 between forest road 504 and 95, located on the Apache-Sitgreaves National Forest. This catchment is located in the Pinion - Juniper mixed woodland. The area supports elk, mule deer, and pronghorn. There is limited seasonal water available in the area so without permanent water, most wildlife in this area would be transient and seasonally restricted.

PROJECT OBJECTIVES:

The project objective is to redevelop two (2) water catchments that will provide big game with perennial water. This is part of the 4B District goal, which is to provide perennial water for big game across the entire unit.

PROJECT DESCRIPTION AND STRATEGIES:

- No Mas and West Indian water catchments: Replace the existing metal apron and steel vault tank (~2,000 gal) with six 2,500 gallon polyethylene storage tanks (15,000 gal), 24'x92' fenced R-panel apron, 4'x5'x8' polyethylene walk-in "elk" drinker and a pipe-rail perimeter fence (175' x 200' x 225' x 175'). See attached CADD drawings.
- Provide a relatively maintenance free perennial water source to wildlife in an area that lacks perennial water.

PROJECT LOCATION:

1.) No Mas: T13N, R16E, section 01. See attached map. Land ownership for this project is Forest Service

2.) West Indian: T13N, R16E, section 14. See attached map. Land ownership for this project is Forest Service.

LAND OWNERSHIP AT THE PROJECT SITE(S)*:*

(if the project area is <u>private property,</u> please state specifically and provide the landowner's name)

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IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?
YES[] NO[] N/A[x]

HABITAT DESCRIPTION:

Madrean Montane Conifer Forest with the principal woodland species consisting of ponderosa pine and pinion juniper woodland. Browse species such as cliff rose are present in the area. Elevations in the project area range from 6,300 to 6,600 feet. Forage conditions are good in this habitat type.

ITEMIZED USE OF FUNDS:
Materials Needed For Catchments:

Quantity	Item	Price	
12	8'w X 13'L X 51"deep 2,500 gallon Polyethylene Water Storage Tank	$41,832.00	($3,486.00 per tank)
2	5'w X 8'L X 4'deep Polyethylene Walk-in Trough	$9,380.00	($4,690.00 per trough)
2	24 X 96' Metal Frame and R-panel Apron	$15,430.00	($ 7,715.00 per apron)
2	3" Schedule 80 PVC Plumbing & 4 brass valves	$ 3,000	(1,500.00 per catchment)
2	175' X 200'x225' x 175' Heavy Duty Pipe-rail Fence (This includes concrete for the whole project)	$ 7,249.00	($3,624.00 per catchment)
2	Elk fence for apron 30' x 100'	$3,888.00	($1944.00 per catchment)
52	Rubber mats for tank and trough support	$2,906.80	($1,453.40 per catchment)
2	Contractor construction cost	$60,000.00	($30, 000 per catchment)

Catchment Costs:
Total = $143,685.80

Arizona Game & Fish:

USDA Forest Service:
State Historic Preservation Office - Archaeological Clearance: 2,500.00
Environmental compliance work = $2,500 **(November 2015)**

Total Cost Share = $5,000.00

Total Cost = $148,685.80

Special Big Game License Tag Funds
$143,685.80

Cost Share or Matching Funds (*for volunteer labor rates please refer to the worksheet below*)

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- Arizona Game and Fish will coordinate and construct or contract the construction of this project
- USDA Forest Service/ Environmental Compliance

WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?
YES[x] NO[] N/A[]

PROJECT MONITORING PLAN:
Arizona Game and Fish conducts wildlife surveys for elk, deer and pronghorn in the project area. The Department will continue to do these surveys and analyze the data with respects to this project. Some anticipated outcomes from the project are better wildlife distribution leading to improved range conditions.

PROJECT MAINTENANCE:
AGFD will monitor and complete all maintenance needs at these wildlife waters.

PROJECT COMPLETION REPORT TO BE FILED BY: E. Lautzenheiser

WATER DEVELOPMENT PROJECTS (*please use the worksheet below***):**

TREE CLEARING/REMOVAL PROJECTS (*please use the worksheet below***):**

ARIZONA GAME AND FISH DEPARTMENT
WATER DEVELOPMENT WORKSHEET

PROJECT TITLE: _____

1) Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?" Yes

2) Please list the Development Branch personnel and date coordinated with for this project.
Joe Currie, August, 2015

3) What is the estimated annual inches of precipitation for the area? (mark one)
[]2-4 []4-6 []6-8 []8-10 []10-12 []12-14 [x]14-16 []>16

4) Is there a perennial water source available to big game within four miles of this project?

YES[x] (please complete #5 below) NO[] (skip #5 below)

5) For the accessible, perennial water source nearest this project:

No Mas
Name of water source: West Indian
Type of water source (catchment, spring, dirt tank, etc.): catchment
Ownership of water source: Forest Service
Distance in miles from project: 1.7 miles

West Indian
Name of water source: No Mas
Type of water source (catchment, spring, dirt tank, etc.): catchment
Ownership of water source: Forest Service
Distance in miles from project: 1.7 miles

6) Is the target wildlife species a result of transplant efforts? YES[] NO[X]

7) Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.
N/A

8) Please provide the following information about access to the proposed site:
Type of access (mark one): [X]2x4 vehicles [X]4x4 only []foot only**

**If foot access only: Distance in miles:_____ Approximate hiking time: _____

-- Does access to this site require crossing private or tribal lands? YES[] NO[X]

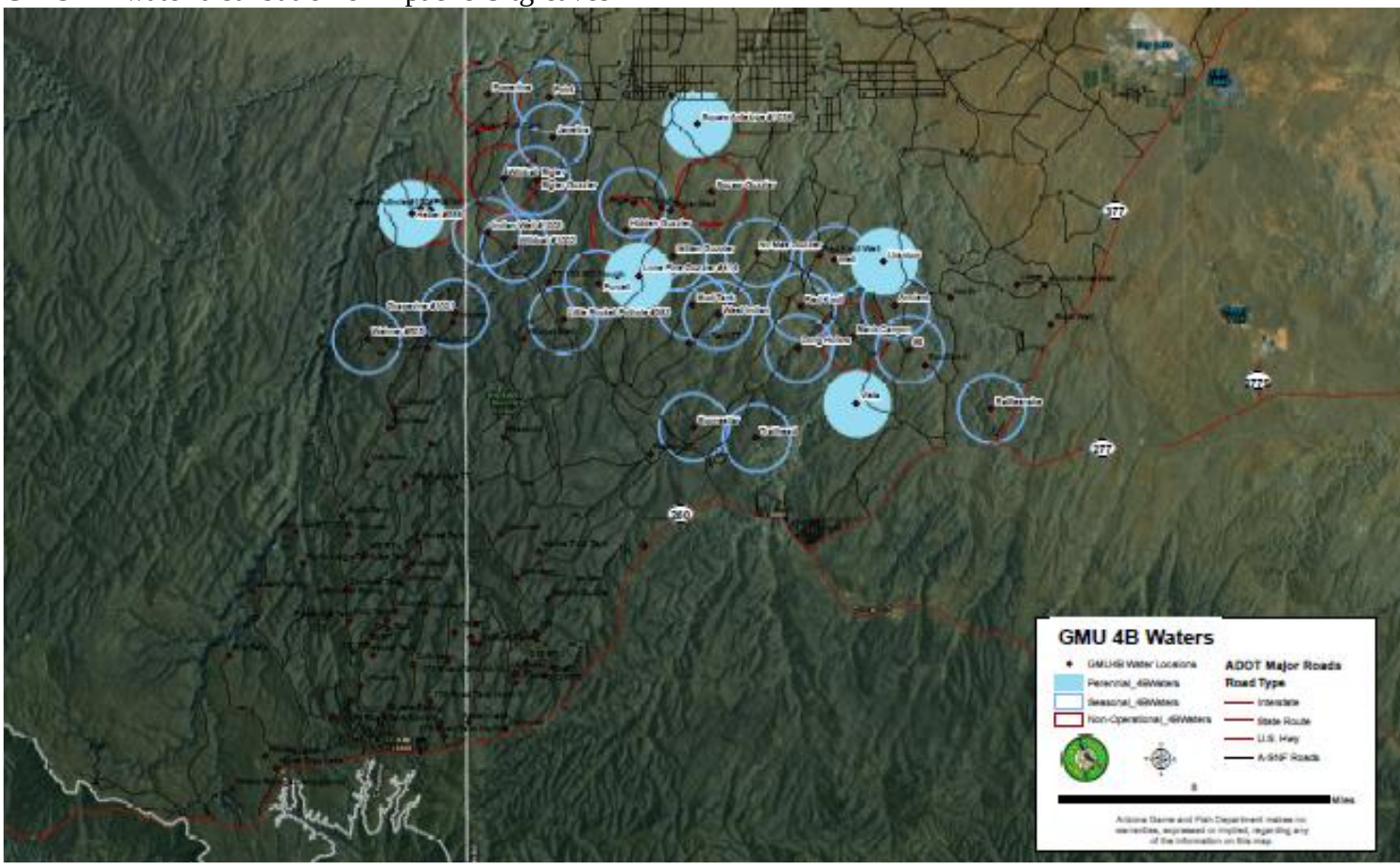
-- Please describe any restrictions to public access: N/A

9) Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.

10) Was a site visit completed? Yes[X] No[]

If Yes, please list personnel that attended and date. E. LAUTZENHEISER, Joe Currie, November 2015

GMU 4B water distribution on Apache-Sitgreaves NF



Catchment locations:

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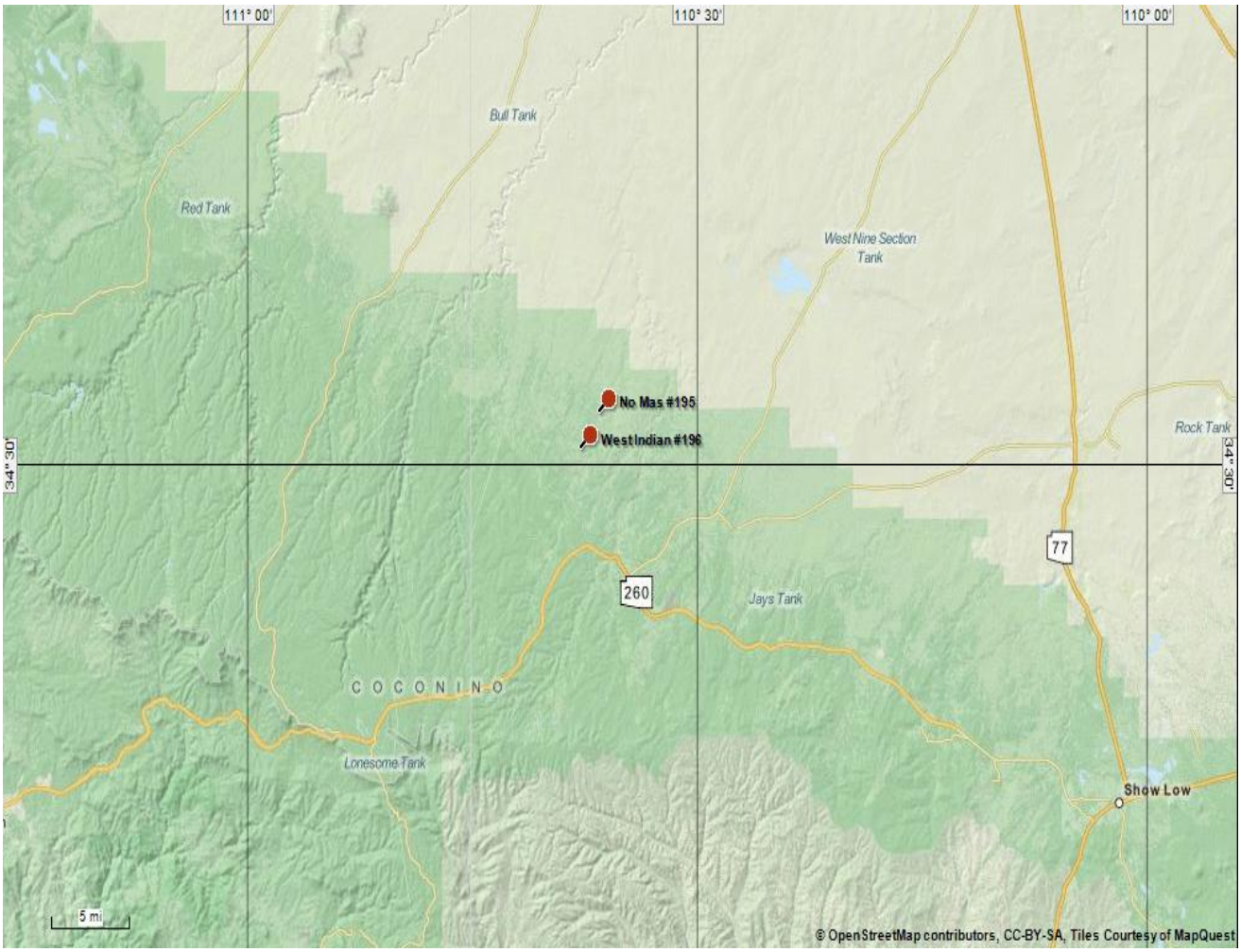
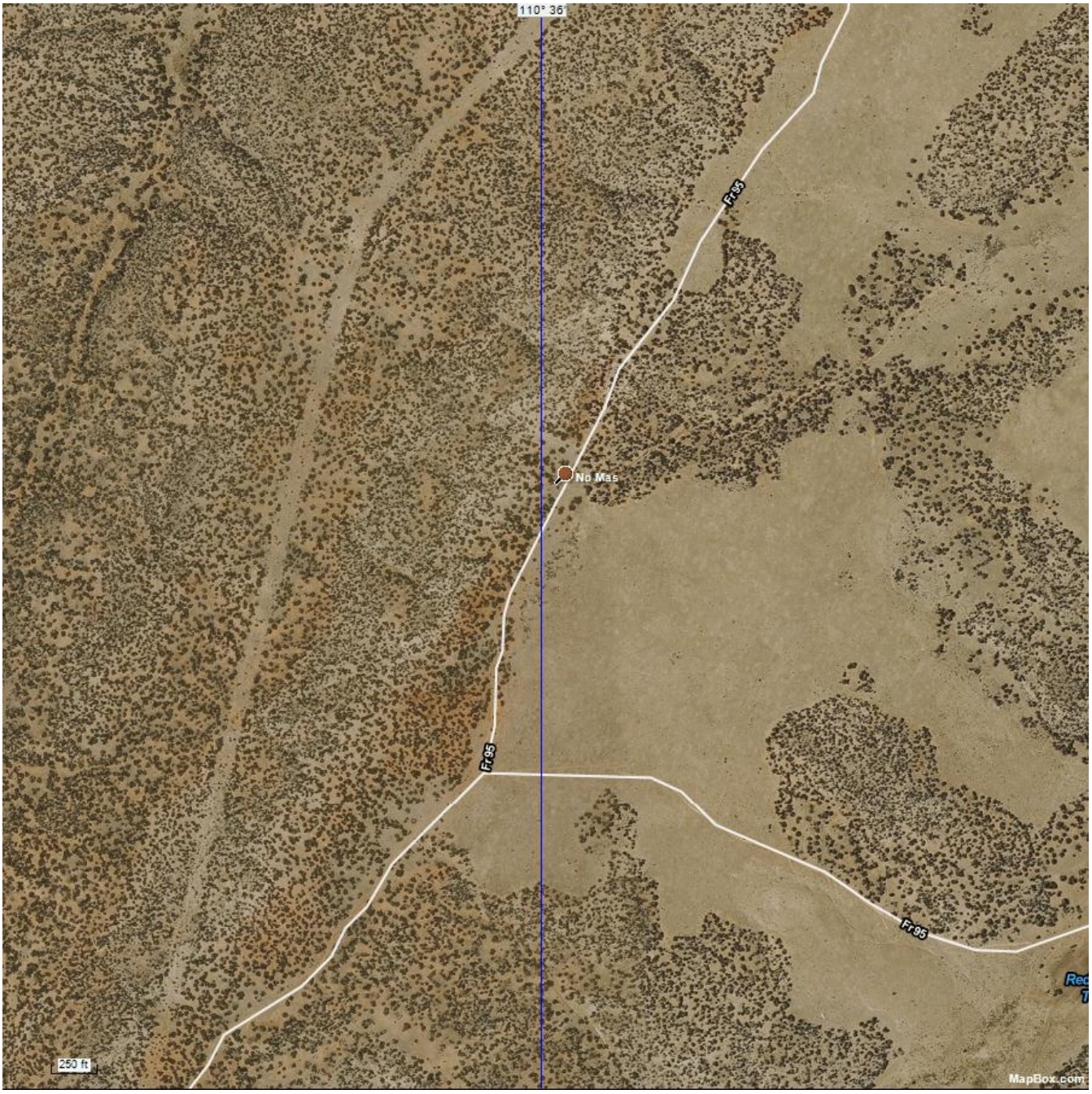
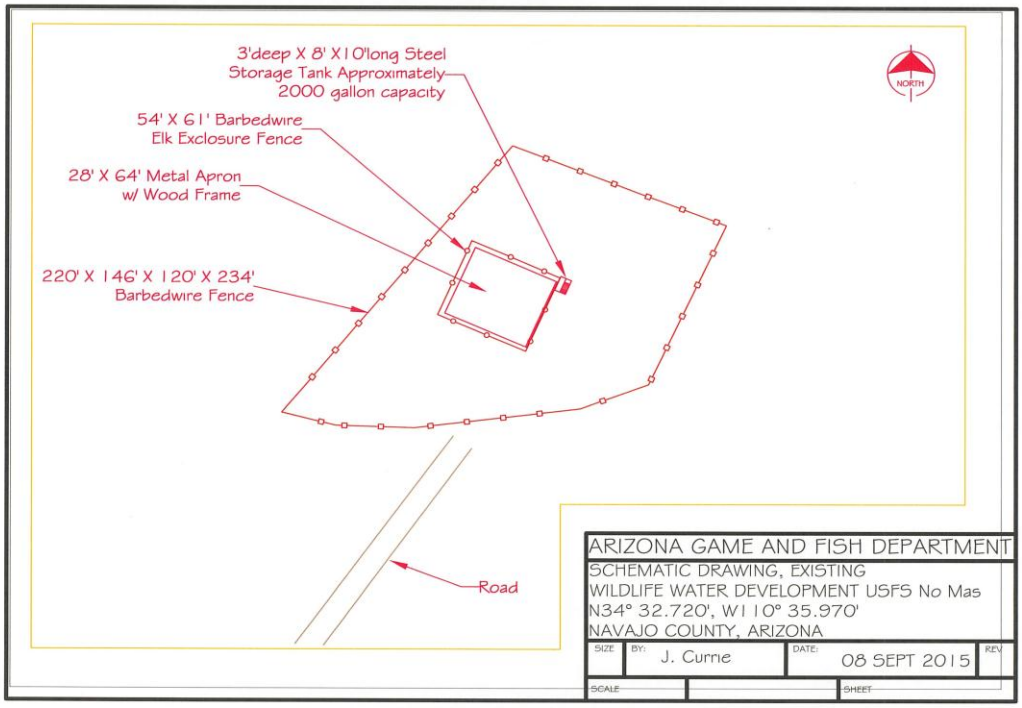
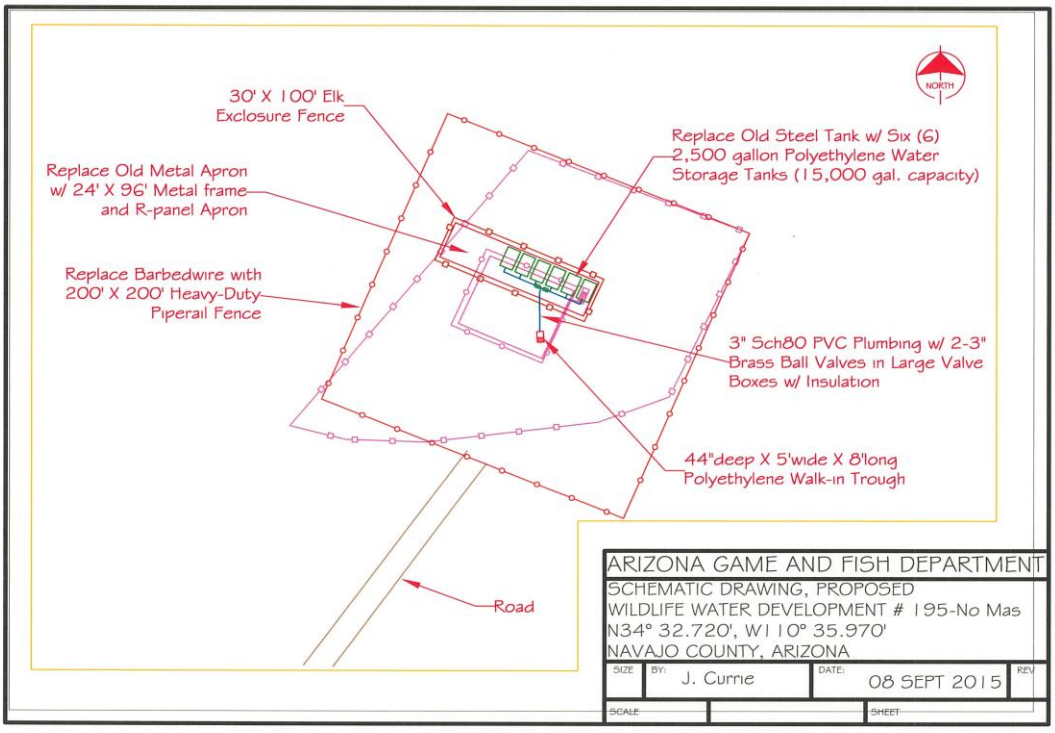



110° 36'
Fr 95
No Mas
Fr 95
Fr 95
250 ft
MapBox.com

Existing



Proposed



REGION I
WILDLIFE WATERS INVENTORY FORM

Water Name: _No Mas_____ **Number:** _____ **GMU:** ___4B__ **Date:** ___1-30-09_____

Identified as Critical Water: _____yes_____ Average Number of Gallons Hauled in Dry Years: ___2-3,000_____

Type: (concrete apron, guzzler, dirt tank, trickle tank with float valve, etc.): steel catch apron, below ground steel vault and drinker.

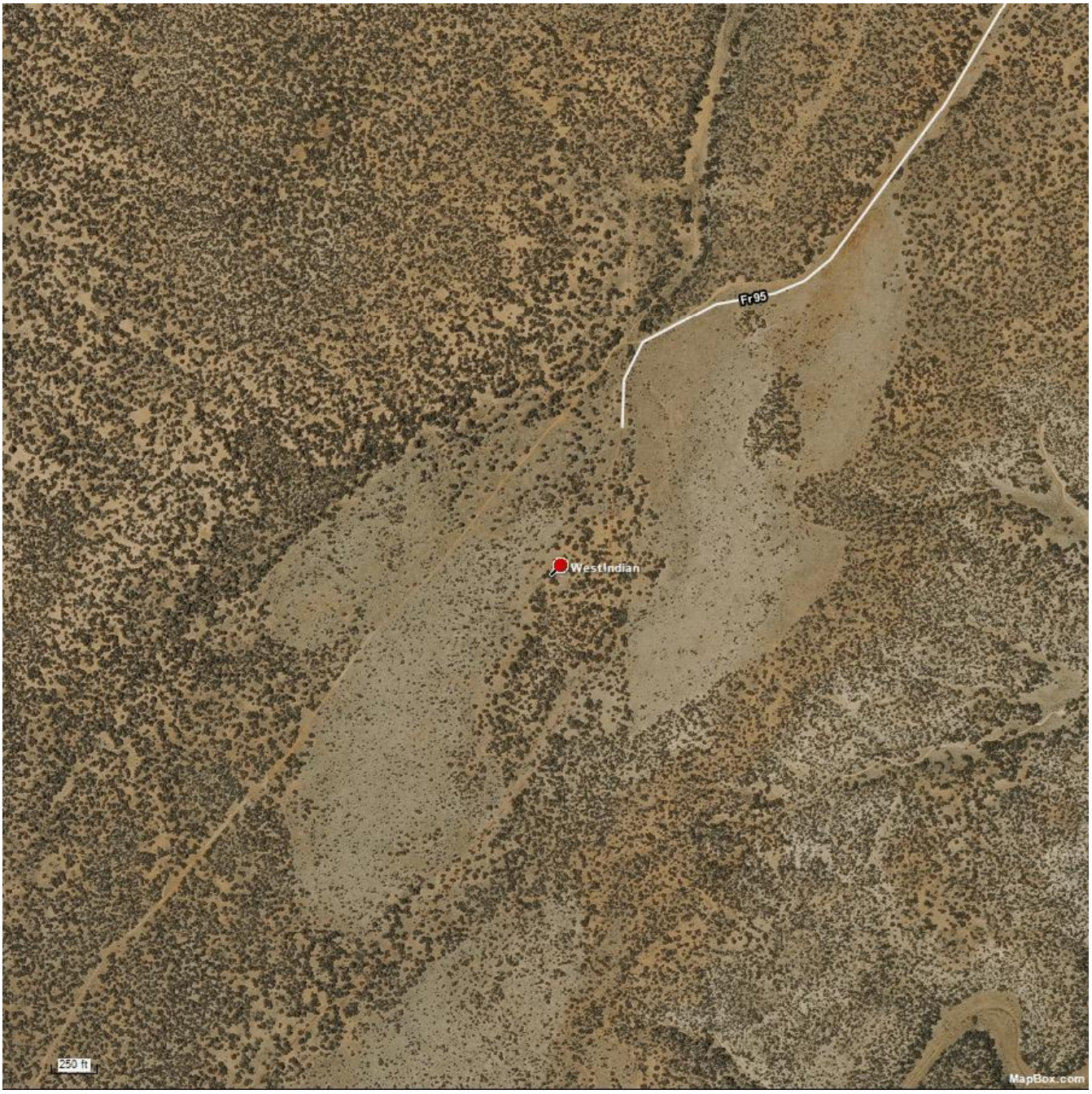
Capacity in gallons: ___~2,000_____ **Elevation:** ___6376_____ **Land Status:** _USFS_____

Primary Wildlife Species: __X___ Elk __X___ Deer ___X__ Antelope ___X__ Javelina _____Turkey

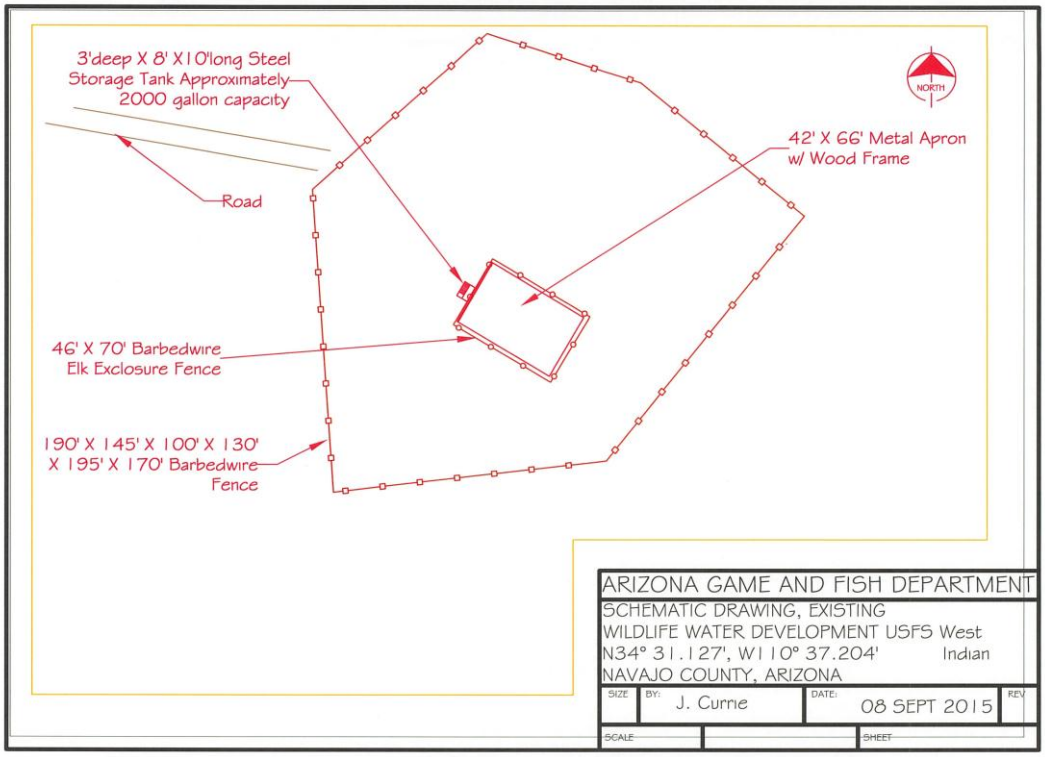
Location: Township__13N____ Range_16E____ Section ___1_____ 12 S _0536747___
UTM_3822698___
N___34_____ degrees ____32____ minutes ___43.2____ seconds
W__110_____ degrees ____35____ minutes ___58.2____ seconds

Directions (use mileposts, forest roads, exact mileages, and as much detail as practical):
From the intersection of the 488A and 95 roads (Red Knoll), travel north 1.7 miles. Turn left onto the 9976 rd and go 1.0 miles, take the faint 2 track north or right (just as you get to the junipers after the old chaining) 0.3 miles to the catchment. The road ends at the catchment.

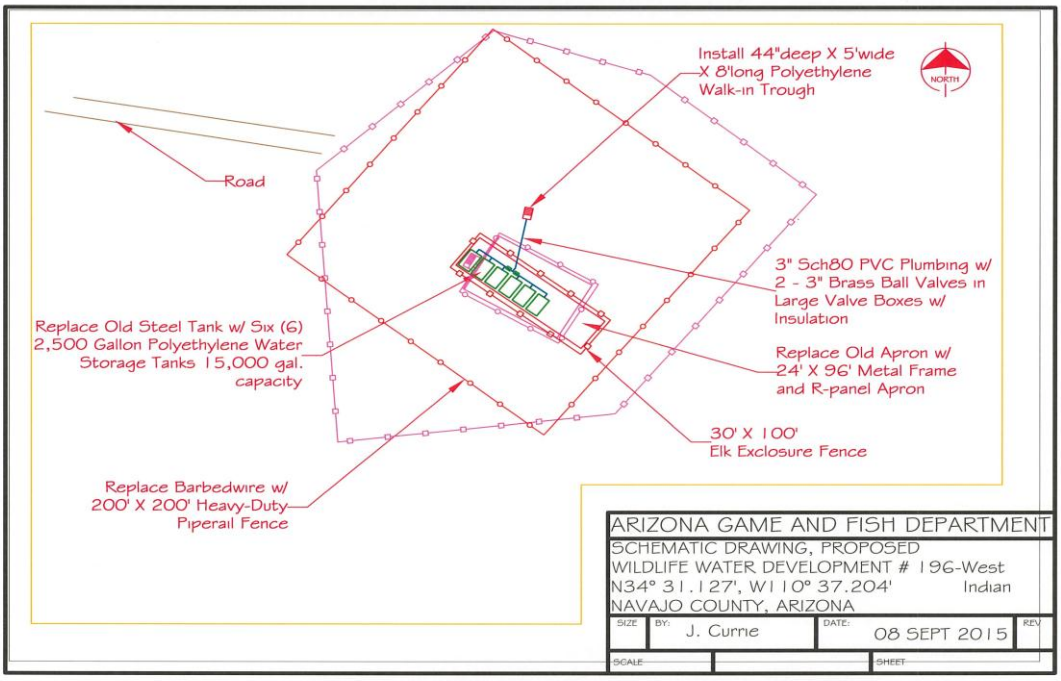
Photographs (please insert photo and/or hand-written directions if necessary):


Fr95
WestIndian
250 ft
MapBox.com

Existing



Proposed



REGION I
WILDLIFE WATERS INVENTORY FORM

Water Name: West Indian (AKA WIND) **Number:** _____ **GMU:** 4B **Date:** 2-16-09

Identified as Critical Water: yes **Average Number of Gallons Hauled in Dry Years: 2-3,000**

Type: (concrete apron, guzzler, dirt tank, trickle tank with float valve, etc.): Steel apron, steel vault and drinker.

Capacity in gallons: ~2,000 **Elevation:** 6547 **Land Status:** USFS

Primary Wildlife Species: X Elk X Deer _____ Antelope _____ Turkey

Location: Township 13N Range 16E Section 14 12 S 0534873
UTM 3819746
N 34 degrees 31 minutes 07.6 seconds
W 110 degrees 37 minutes 12.2 seconds

Directions (use mileposts, forest roads, exact mileages, and as much detail as practical):
From the intersection of the FS rd 504 X 228 X 9976B (MP 4.9 on the 504), travel east on the 9976B 0.5 miles. Turn right on the 9976 rd. Travel 4.2 miles total. At 2.9 miles stay right (rd to Mud Trick drinker). The catchment can not be seen from the 9976, it will be on your right, not the left as shown on other maps. There is no rd to the catchment itself, but you can access it cross country.

Photographs (please insert photo and/or hand-written directions if necessary):